

**2011 WorldSkills Australia School / College
Metal & Engineering Competition
MLS11/2 Organisers' Pre-Competition Information**

PREAMBLE

This is essential reading – Please take the time to read these notes carefully.

The aim of this project is two fold.

Firstly it is a WorldSkills competition that ranks competitors according to the skills demonstrated on the day.

Secondly, it is an assessment of competence to given competency standards, in this case:

MEM 1.4FA	Plan to undertake routine task
MEM 1.2FA	Occupational Health & Safety
MEM 2.1C12A	Apply Quality Procedures
MEM 1.3FA	Plan & Undertake a Task
MEM 2.5CIIA	Measure with Graduated Devices
MEM 9.2AA	Interpret Technical Drawing
MEM 18.1AA	Use of Hand Tools
MEM 2.8C10A	Perform Computations
MEM 18.2 AA	Use of Power Tools

Thus aside from a WorldSkills competition it is envisaged that this project may prove to be a useful and practical assessment tool that TAFE teachers will be able to incorporate into their courses at various levels.

Duration: 3 Hours

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The Task

Plan and manufacture a metal clamp.

It is a criteria of competency that students/competitors must be able to make decisions relating to the task at hand.

Option 1: Gather competitors the evening/week before the event and have them design their projects and fill out the "order form". This has the obvious advantage of lead time for organisers. The disadvantage of course, being the need to gather competitors twice.

Competitors must complete the design and order element on their own and thus cannot take the specifications or order documents home.

Option 2: Use the materials list provided [attached] and ensure access to "valid" alternatives on the day. The project should take not more than 3 hours so there is ample time for material issue and construction.

Competitors, students or other persons wishing to be accredited with the competencies listed above may be assessed using the marking scale provided. The means by which they are deemed competent is described both in the judge's and competitor's instructions.

Materials and Resources (Per Competitor)

Item 1	75mm x 6mm BMS	+120mm
Item 2 & 6	20mm x 10mm BMS	+180mm
Item 3	CSK Screws M6 x 1 x 25	(2 off)
Item 4	Ø 10mm BMS	+80mm (2 off)
Item 5	Nuts M10 x 1.5	(2 off)

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TOOLS & EQUIPMENT TO BE SUPPLIED BY THE ORGANISERS

To run this project as a WorldSkills event or an assessment you will need the following tools:

- Ball Pein hammer
- Centre punch
- Prick punch
- 300mm rule
- Scriber
- 6mm x 1mm tap
- Tap wrench
- 10mm stock D.E
- Ø 10.5 drill bit
- Ø 5mm drill bit
- Ø 6.5mm drill bit
- CSK to suit screws
- 10mm x 1.5mm tap
- Jaw Guards
- A range of files
- Emery paper
- Hack saw
- Drill press
- Dividers
- Mark media
- Engineers square
- Flat screw driver

Although part of the assessment is that competitors must check their equipment before proceeding, please ensure all equipment is in working order before the beginning of the competition.

OH&S Requirements

Electrical Equipment test & tag - Organisers and Competitors - Only 240V & 415v electrical equipment that has been tested by a competent person and has a current test tag attached shall be allowed to be used in the competitions

Demonstrate Good Housekeeping - Organisers and Competitors are required to properly manage their workplace, including minimising waste, preventing unavoidable power/gas consumption and effectively using materials and tools.

Safe Work Method Statement - Competitors must complete a Safe Work Method Statement in preparation to compete in the competition. Completed Safe Work Method Statements must be submitted to the Chief Judge prior to the start of the competition. No competitor will be allowed to compete in the competition unless a Safe Work Method Statement has been completed.

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Electrical Procedures - Organisers and Competitors involved in any electrical activities associated with the competitions are required to use a safe system of work. This shall include following the WorldSkills Australia Electrical procedure and completing an Electrical Risk Assessment prior to competition.

Safety Checklist

The Safety Checklists are to be completed by the Chief Judge in each category prior to commencing the competitions each day

The Safety Checklists will help you maintain a safe working environment

Workers includes all persons associated with the competition work areas